

## **REMARKS**

### **STATUS OF THE CLAIMS**

The Office Action mailed August 22, 2006 has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 55, 56 and 83-86 have been amended, and no claims have been newly added. Accordingly, claims 55-105 are submitted for reconsideration.

### **OBJECTIONS TO THE CLAIMS**

Claims 83-86 were objected to for grammatical informalities. In response, Applicant amends claims 83-86 in the manner suggested by the Examiner. Accordingly, reconsideration and withdrawal of the objection is respectfully requested.

### **PRIOR ART REJECTIONS**

U.S. Patent No. 6,005,891 ("Chadwick") is the basic reference applied in all of the rejections. Claims 55-57 and 59 were rejected under 35 U.S.C. § 102(b) as being anticipated by Chadwick. Claims 60-61 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chadwick in view of U.S. Patent No. 3,691,519 ("Wolf"). Claims 62-69 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chadwick in view of U.S. Patent No. 3,798,608 ("Huebner"). Claims 70-104 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chadwick in combination with Huebner and in further view of U.S. Patent No. 3,303,284 ("Lender"). Claim 105 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chadwick in view of in combination with Huebner and in further view of U.S. Patent No. 5,586,054 ("Jensen").

In response, Applicant amends independent claim 55, and traverses the rejections for at least the following reasons.

Applicant submits that neither Chadwick nor any of the other applied references discloses or suggests the features recited in original or amended independent claim 55. Specifically, claim 55 now recites, *inter alia*, "reflecting said signal back to said first equipment in a variable manner that varies corresponding to a first bit sequence." Variation of the reflected signal is implicit in the originally recited phrase "in a manner *corresponding*

to a first *bit sequence*; the added words “variable” and “varies” simply make this feature explicit. Moreover, the present invention extracts useful information in the form of the first bit sequence from the reflected signal. This limitation is recited in claim 55 as follows: “comparing said signal thus reflected with said transmitted signal to thereby extract said first bit sequence.” This deliberate, variable reflection (in a manner corresponding to a first bit sequence) to implement bi-directional communication is not taught or suggested by Chadwick.

Specifically, Chadwick is directed to a system for testing a signal transmission/reception apparatus, i.e., a receive antenna. Chadwick discloses injecting a pseudo noise (digital) signal into a receive antenna. (*See* Col. 1, lines 58-60.) If the antenna is defective, a portion of the pseudo noise signal is reflected from the antenna. (*See* Col. 1, lines 60-62.) The reflected signal is processed and compared with the pseudo noise signal to produce a digital number representing the condition of the antenna. (*See* Abstract.)

Thus, Chadwick only examines the returned signal for similarity to the transmitted signal and measures its magnitude (i.e., a digital number representing the condition of the antenna). Chadwick does not disclose, teach or suggest a method having the steps of “reflecting said signal back to said first equipment in a variable manner that varies corresponding to a first bit sequence” nor does it disclose “comparing said signal thus reflected with said transmitted signal to thereby extract said first bit sequence.”

Accordingly, Chadwick does not disclose each and every element of independent claim 55. Further, Wolf, Huebner, Lender and Jensen fail to cure the deficiencies of Chadwick. Claims 56-105 depend from independent claim 55 and are allowable for at least the reasons set forth above without regard to the further patentable limitations recited therein.

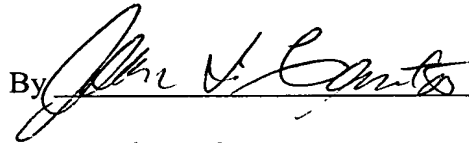
### **CONCLUSION**

Applicant submits that the application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By 

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